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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,658	08/24/2001	Elsa Jolimaitre	PET-1949	1667
23599	7590	09/27/2002	EXAMINER	
MILLEN, WHITE, ZELANO & BRANIGAN, P.C. 2200 CLARENDON BLVD. SUITE 1400 ARLINGTON, VA 22201			NGUYEN, TAM M	
		ART UNIT	PAPER NUMBER	
		1764	S	
DATE MAILED: 09/27/2002				

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.	Applicant(s)
09/935,658	JOLIMAITRE ET AL.
Examiner	Art Unit
Tam M. Nguyen	1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) Responsive to communication(s) filed on 24 August 2001.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) Claim(s) 1,2 and 19-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1,2 and 19-34 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.

- 4) Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 2 and 19-34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted step is a step of separating multibranched paraffins from a hydrocarbon feed.

The expression "in particular linear, monobranched and multibranched paraffins" in line 2 of claim 1 renders the claim indefinite because it renders the scope of the claim unascertainable.

Claim 1 is also indefinite because it is unclear what happens when the hydrocarbon feed is contacted with a zeolite adsorbent.

The expression "fractionating said hydrocarbon feed into at least two distinct effluents" in lines 1-2 of claim 28 renders the claim indefinite because it is unclear if the hydrocarbon feed is contacted with the zeolite before or after the fractionation step.

The expression "fractionating said hydrocarbon feed into three distinct effluents" in lines 1-2 of claim 29 renders the claim indefinite because it is unclear if the hydrocarbon feed is contacted with the zeolite before or after the fractionation step.

Claims 30 and 31 recite the limitation "the separation unit" in the last line of the claims.

There is insufficient antecedent basis for this limitation in the claims.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 19, and 28-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Zinnen et al. (5,744,684).

Zinnen discloses a process for separating normal and mono paraffins from multibranched paraffins in a mixture by contacting the mixture with an adsorbent of EU-1 to produce a stream rich in mono branched paraffin, a stream rich in normal paraffin, and a stream rich in multibranched paraffin. The separating step is operated at a temperature from of 100 to 300<sup>0</sup> C and at a pressure from of 6 to 500 psig (0.04 to 3 MPa). It is noted that Zinnen does not specifically disclose the characteristics of EU-1 adsorbent. However, the EU-1 adsorbent is the same as the claimed adsorbent. Therefore, the Zinnen adsorbent would have the claimed characteristics. (See entire patent)

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1764

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zinnen et al. (5,744,684).

Regarding claims 25-27, Zinnen does not specifically disclose the origin of the feed. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Zinnen by using a feed from the claimed sources because the Zinnen feed is similar to claimed feed. Therefore, where the feed comes from does not affect the outcome of the Zinnen process.

***Allowable Subject Matter***

Claims 20-24 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: No prior art of record discloses or renders obvious a process of separating multibranched paraffins from a hydrocarbon feed containing 5 to 8 carbon atoms per molecule by contacting the hydrocarbon feed with a zeolite (e.g., NES, MWW, NU-85, NU-86) as called for in claims 20-24.

***Conclusion***

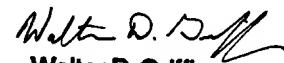
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam M. Nguyen whose telephone number is (703) 305-7715. The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marian Knodel can be reached on 703 308 4311. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-5408 for regular communications and (703) 305-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Tam M. Nguyen  
Examiner  
Art Unit 1764

Tam Nguyen/ TN  
September 23, 2002

  
Walter D. Griffin  
Primary Examiner

**U.S. DEPARTMENT OF COMMERCE**  
**PATENT AND TRADEMARK OFFICE**

**EXAMINER'S CASE ACTION WORKSHEET**

Application No.  
09/935,658



Legal Instrument Examiner

CHECK TYPE OF ACTION

DATE OF COUNT

<input checked="" type="checkbox"/> Non-Final Rejection	<input type="checkbox"/> Restriction/Election Only	<input type="checkbox"/> Final Rejection
<input type="checkbox"/> Ex Parte Quayle	<input type="checkbox"/> Allowance	<input type="checkbox"/> Advisory Action
<input type="checkbox"/> Examiner's Answer	<input type="checkbox"/> Reply Brief Noted	<input type="checkbox"/> Non-Entry of Reply Brief
<input type="checkbox"/> Defective Notice of Appeal	<input type="checkbox"/> Interference Disposal SPE _____ (Approval for Disposal)	<input type="checkbox"/> Suspension (Examiner-Initiated) SPE _____ (initial)
<input type="checkbox"/> Defective Appeal Brief	<input type="checkbox"/> SIR Disposal (use only after FAOM)	<input type="checkbox"/> Supplemental Examiner's Amendment
<input type="checkbox"/> Miscellaneous Office Letter (With Shortened Statutory Period Set)	<input type="checkbox"/> Notice of Non-Responsive Amendment (With One Month Time Period set)	<input type="checkbox"/> Miscellaneous Office Letter (No Response Period Set)
<input type="checkbox"/> Abandonment after BPAI Decision	<input type="checkbox"/> Supplemental Action (excluding Examiner's Answer)	<input type="checkbox"/> Response to Rule 312 Amendment
<input type="checkbox"/> Letter Restarting Period for Response (e.g., Missing References)	<input type="checkbox"/> Interview Summary	<input type="checkbox"/> Authorization to Change Previous Office Action SPE: _____ (Initial)
<input type="checkbox"/> Abandonment	<input type="checkbox"/> Express Abandonment Date: _____	<input type="checkbox"/> Other Specify: _____

Examiner's Name: Tam M. Nguyen

AU: 1764